RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)

DATE: February 2000

BUDGET ACTIVITY: 04 - Demonstration and Validation

PE NUMBER AND TITLE: 0604237F Variable Stability In-Flight Simulation Test Aircraft

PROJECT: 643308

COST ($ in Thousands)		FY 1999 Actual	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost
643308	Variable Stability In-Flight Simulation Test Aircraft	3,833	0	0	0	0	0	0	0	59,508
	Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0

(U) A. Mission Description

This program uses a modified F-16D to create a versatile high-performance flying simulator to replace the NT-33A aircraft, which retired in May 1997. For the past 39 years, the research and development flight test community extensively employed the variable stability NT-33A for flight evaluation of fielded aircraft upgrades and new aircraft developments. Its success has been directly attributable to its relatively low-cost of operation, rapid response to customer needs, and high degree of credibility in the flight test community. VISTA was developed to replace the NT-33A because the NT-33A's performance was not representative of future aircraft (it was the oldest aircraft in the Air Force still actively flying). VISTA has the capability to simulate a wide range of air vehicles to verify crucial flight control and human factor designs, establish flying qualities specification criteria, and operate as a flying laboratory for flight control and cockpit display research. In addition, the Air Force Test Pilot School has used VISTA, as they have the NT-33A, to safely train test pilots to evaluate aircraft handling quality, avionics, and human factors designs in a realistic high-performance environment. Note: Congress added $6.0 million to this PE in FY 1998 and $4.0 million in FY 1999 for VISTA. There are no plans to request future funding in this PE to continue operating the VISTA aircraft. In FY 2000, the Air Force will either retire the VISTA or transfer the airplane to another Air Force organization, the National Aeronautics and Space Administration, or industry.

(U) FY 1999 ($ in Thousands)

(U) $3,833 Continued upgrade program that provides electrical and mechanical interfaces for future installation of an F100-PW-299 engine with an existing axisymmetric thrust vectoring nozzle and a programmable display subsystem, and continued flight testing to investigate flight control laws and performance characteristics of fielded aircraft upgrades, new aircraft developments, and test pilot training.

(U) $3,833 Total

(U) FY 2000 ($ in Thousands)

(U) $0 No Activity.

(U) $0 Total

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(U) A. Mission Description Continued

(U) FY 2001 ($ in Thousands)

(U) $0 No Activity.

(U) $0 Total

(U) B. Budget Activity Justification

This program is in Budget Activity 4, Demonstration and Validation, since it includes efforts necessary to evaluate integrated technologies in as realistic an operating environment as possible to assess performance or cost reduction potential.

(U) C. Program Change Summary ($ in Thousands)

		FY 1999	FY 2000	FY 2001	Total Cost
(U)	Previous President's Budget (FY 2000 PBR)	3,989	0	0	
(U)	Appropriated Value	4,000	0		
(U)	Adjustments to Appropriated Value				
	a. Congressional/General Reductions	-11			
	b. Small Business Innovative Research	-135			
	c. Omnibus or Other Above Threshold Reprogram				
	d. Below Threshold Reprogram				
	e. Rescissions	-21			
	f. Other		0		
(U)	Adjustments to Budget Years Since FY 2000 PBR				
(U)	Current Budget Submit/FY 2001 PBR	3,833	0	0	

(U) Significant Program Changes:

Not Applicable.

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(U) D. Other Program Funding Summary ($ in Thousands)

	FY 1999 Actual	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost
(U) Related Activities:									
(U) PE 0602201F, Aerospace Flight Dynamics.									
(U) PE 0603245F, Flight Vehicle Technology Integration.									

(U) E. Acquisition Strategy

Not Applicable.

(U) F. Schedule Profile

	FY 1999				FY 2000				FY 2001			
	1	2	3	4	1	2	3	4	1	2	3	4
(U) Not Applicable.												

RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)

DATE: February 2000

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
04 - Demonstration and Validation	0604237F Variable Stability In-Flight Simulation Test Aircraft	643308

(U) A. Project Cost Breakdown ($ in Thousands)

	FY 1999	FY 2000	FY 2001
(U) Not Applicable.			
(U) Total			

(U) B. Budget Acquisition History and Planning Information ($ in Thousands)

(U) Performing Organizations:

Contractor or Government Performing Activity	Contract Method/Type or Funding Vehicle	Award or Obligation Date	Performing Activity EAC	Project Office EAC	Total Prior to FY 1999	Budget FY 1999	Budget FY 2000	Budget FY 2001	Budget to Complete	Total Program
Product Development Organizations										
Support and Management Organizations										
Test and Evaluation Organizations										
Not Applicable.										

Subtotals	Total Prior to FY 1999	Budget FY 1999	Budget FY 2000	Budget FY 2001	Budget to Complete	Total Program
Subtotal Product Development						
Subtotal Support and Management						
Subtotal Test and Evaluation						
Total Project						